

WHAT IS CLAIMED IS:

1. 1. A method for identifying a cloaked remote system comprising
2. receiving from a first remote system a representation of a first object, said first object
3. returned by a second remote system to said first remote system in response to a first request
4. from said first remote system for an object corresponding to a network address, said second
5. remote system addressed by said network address;
6. receiving from the second remote system a second object in response to a second
7. request for the object corresponding to said network address;
8. comparing the representation of the first object to a representation of the second
9. object, and determining that the second remote system is cloaked if said representation of the
10. first object does not match said representation of the second object.

1. 2. The method of claim 1, further comprising
2. sending to the first remote system the network address prior to receiving from the first
3. remote system the representation of the first object.

1. 3. The method of claim 2, further comprising
2. selecting the network address from a set of network addresses according to a
3. predefined function.

1. 4. The method of claim 2, further comprising
2. periodically sending one of a set of network addresses to the first remote system
3. according to a predefined schedule, the network address being selected from said set of
4. network addresses.

1. 5. The method of claim 2, further comprising
2. receiving from the first remote system a request for the network address prior to
3. sending the network address to the first remote system.

1. 6. The method of claim 2, further comprising

2 receiving from the first remote system a request for search engine services prior to
3 sending the network address to the first remote system; and
4 sending to the first remote system a response to the request for the search engine
5 services, said response to the request for the search engine services including the network
6 address.

1 7. The method of claim 6, wherein
2 the request for search engine services includes one or more search terms; and
3 the response to the request for search engine services includes one or more network
4 addresses corresponding to the one or more search terms.

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1 8. The method of claim 7, wherein
2 the network address corresponds to the one or more search terms.

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1 9. The method of claim 7, further comprising
2 when the second remote system is determined to be cloaked, excluding from the
3 response to the request network addresses addressing the second remote system.

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1 10. The method of claim 6, wherein
2 the response to the request for search engine services includes an instruction directing
3 the first remote system to return the representation of the first object.

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1 11. The method of claim 1, wherein
2 the representation of the first object is a first feature vector comprising a first set of
3 features;
4 the representation of the second object is a second feature vector comprising a second
5 set of features; and
6 the comparing and determining including determining whether the second feature
7 vector has at least a predetermined number of features in common with the first feature
8 vector.

1 12. The method of claim 1, further comprising

2 maintaining a list of network addresses corresponding to a search term, said list of
3 network addresses including the network address; and
4 removing from the list of network addresses the network address if the representation
5 of the first object does not match the representation of the second object.

1 13. The method of claim 1, further comprising
2 maintaining a list of cloaked remote systems; and
3 adding to the list of cloaked remote systems the second remote system if the
4 representation of the first object does not match the representation of the second object.

14. A computer system for identifying a cloaked web server comprising:
1 a central processing unit, an instruction module, and a network interface;
2 the instruction module being executable by the central processing unit and including
3 client interface instructions for receiving from a client computer through the
4 network interface a representation of a first object, said first object returned by a web server
5 to said client computer in response to a first request from said client computer for an object
6 corresponding to a network address, said web server addressed by said network address;
7 web server interface instructions for receiving through the network interface a
8 second object returned by the web server in response to a second request from the computer
9 system for the object corresponding to the network address; and
10 compare instructions for comparing the representation of the first object to a
11 representation of the second object and for determining that the web server is cloaked if said
12 representation of the first object does not match said representation of the second object.

1 15. The computer system of claim 14, the instruction module further comprising
2 additional client interface instructions for sending the network address to the client
3 computer prior to receiving the representation of the first object from said client computer.

1 16. The computer system of claim 15, the instruction module further comprising
2 instructions for selecting the network address from a set of network addresses
3 according to a predefined function.

1 17. The computer system of claim 16, the instruction module further comprising
2 instructions for periodically sending one of a set of network addresses to the client
3 computer according to a predefined schedule, the network address being selected from said
4 set of network addresses.

1 18. The computer system of claim 15, the instruction module further comprising
2 instructions for receiving from the client computer a request for the network address
3 prior to sending the network address to the client computer.

1 19. The computer system of claim 15, the instruction module further comprising
2 instructions for receiving from the client computer a request for search engine services
3 prior to sending the network address to the client computer; and
4 instructions for sending to the client computer a response to the request for the search
5 engine services, said response to the request for the search engine services including the
6 network address.

1 20. The computer system of claim 19, wherein
2 the computer system comprises a web server configured to provide search engine
3 services to one or more client computers.

1 21. The computer system of claim 19, wherein
2 the request for search engine services includes one or more search terms; and
3 the response to the request for search engine services includes one or more network
4 addresses corresponding to the one or more search terms.

1 22. The computer system of claim 21, wherein
2 the network address corresponds to the one or more search terms.

1 23. The computer system of claim 21, the instruction module further comprising
2 instructions for excluding from the response to the request network addresses
3 addressing the second remote system when the second remote system is determined to be
4 cloaked.

1 23. The computer system of claim 19, wherein
2 the response to the request for search engine services includes an instruction directing
3 the client computer to return the representation of the first object.

1 24. The computer system of claim 19, the instruction module further comprising
2 instructions for deriving the representation of the second object;
3 wherein
4 the representation of the first object is a first feature vector comprising a first set of
5 features;
6 the representation of the second object is a second feature vector comprising a second
7 set of features; and
8 the compare instructions include instructions for determining whether the second
9 feature vector has at least a predetermined number of features in common with the first
10 feature vector.

1 25. The computer system of claim 19, the instruction module further comprising
2 instructions for maintaining a list of network addresses corresponding to a search
3 term, said list of network addresses including the network address; and
4 instructions for removing from the list of network addresses the network address if the
5 representation of the first object does not match the representation of the second object.

1 26. The computer system of claim 14, the instruction module further comprising
2 instructions for maintaining a list of network addresses corresponding to a search
3 term; and
4 instructions for removing from the list of network addresses each network address
5 corresponding to the web server if said web server is cloaked.

1 27. The computer system of claim 14, the instruction module further comprising
2 instructions for maintaining a list of cloaked web servers; and
3 instructions for adding to the list of cloaked web servers the web server if said web
4 server is determined to be cloaked.

1 28. A computer program product for use in conjunction with a computer system, the
2 computer program product comprising a computer readable storage medium and a computer
3 program mechanism embedded therein, the computer program mechanism comprising:

4 client interface instructions for receiving from a client computer a representation of a
5 first object, said first object returned by a web server to said client computer in response to a
6 first request from said client computer for an object corresponding to a network address, said
7 web server addressed by said network address;

8 web server interface instructions for receiving a second object returned by the web
9 server in response to a second request from said computer system for the object
10 corresponding to said network address; and

11 compare instructions for comparing the representation of the first object to a
12 representation of the second object to determine if the representation of the first object
13 matches the representation of the second object; and

14 cloak determination instructions for determining that the web server is cloaked if said
15 representation of the first object does not match said representation of the second object.

29. A computer program product for use in conjunction with a computer system, the
2 computer program product comprising a computer readable storage medium and a computer
3 program mechanism embedded therein, the computer program mechanism comprising:

4 instructions for receiving from a first remote system a network address;
5 instructions for sending to a second remote system addressed by the network address a
6 request for an object corresponding to said network address;

7 instructions for receiving the object from the second remote system; and

8 instructions for sending a representation of the object to the first remote system.

30. The computer program product of claim 29, further comprising
2 instructions for deriving the representation of the object, wherein the representation of
3 the object is a feature vector comprising a set of features.

31. The computer program product of claim 29, further comprising
2 instructions for sending to the first remote system a request for the network address.

1 32. The computer program product of claim 31, wherein
2 the computer program mechanism is configured to periodically re-execute said
3 instructions according to a predefined function.

1 33. The computer program product of claim 29, wherein
2 the computer program mechanism comprises a web browser.

1 34. The computer program product of claim 29, wherein
2 the computer program mechanism is configured to operate in conjunction with a web
3 browser.

1 35. The computer program product of claim 34, wherein
2 the instructions for sending to the second remote system the request for the object
3 comprise instructions for directing the web browser to send said request to said second
4 remote system.

1 36. The computer program product of claim 35, wherein
2 the instructions for receiving the object from the second remote system comprise
3 instructions for directing the web browser to receive said object from the second remote
4 system and to forward said representation to said computer program mechanism.

1 37. A computer program product for use in conjunction with a computer system, the
2 computer program product comprising a computer readable storage medium and a computer
3 program mechanism embedded therein, the computer program mechanism comprising:
4 instructions for sending to a first remote system a request for a set of network
5 addresses corresponding to a set of search terms, said search terms being included with said
6 request;
7 instructions for receiving from the first remote system a response including the set of
8 network addresses;
9 instructions for extracting from the response a first network address;

10 instructions for sending to a second remote system addressed by the first network
11 address a request for an object corresponding to said first network address;
12 instructions for receiving the object from the second remote system; and
13 instructions for sending a representation of the object to the first remote system.

1 38. The computer program product of claim 37, further comprising
2 instructions for deriving the representation from the object.

1 39. The computer program product of claim 37, wherein
2 the representation of the object is a feature vector, wherein the representation of the
3 object is a feature vector comprising a set of features.

1 40. The computer program product of claim 37, wherein
2 the computer program mechanism comprises a web browser.

1 41. The computer program product of claim 37, wherein
2 the computer program mechanism is configured to operate in conjunction with a web
3 browser.

1 42. The computer program product of claim 41, wherein
2 the instructions for sending to the second remote system the request for the object
3 comprise instructions for directing the web browser to send said request to said second
4 remote system.

1 43. The computer program product of claim 42, wherein
2 the instructions for receiving the object from the second remote system comprise
3 instructions for directing the web browser to receive said object from the second remote
4 system and forward said representation to said first remote system.

1 44. The computer program product of claim 37, wherein
2 the first network address corresponds to the set of search terms.